

SUPPORT FOR AMENDMENTS TO CLAIMS:

Claim 1: "amended"

Independent claim. Added the word "payload" to the description "payload platform" to more precisely identify that physical part of the invention. The word "payload" is found in original claim 4, in Background of the Invention line 4, in Brief Description of Related Art line 7, and other places. Removed the words "or flopping" as discussed with the Examiner during the interview.

Claim 2: "amended"

Independent claim. Lines 1-3 are contained in original Claim 1, plus added descriptor "payload" to identify the platform.

Claim lines 4-7 starting at "a stabilizing system connecting the stabilized platform to the base ..." are found on Page 9, line 23 which states: "All embodiments preferably can receive sensor data or direct stabilization commands from the ship's gyro compass or other sensing source via hard wire or wireless remote control."

Claim lines 8-10 starting with "a braking system..." which is found in original Claim 1 with the word "flopping" removed per discussion with the Examiner.

Claim lines 11-13 starting with "a control system wherein the sensor data ..." is found on Page 5 line 4: "The present invention automatically corrects to remove the effects of natural centrifugal forces. In addition the "banking" effect can be adjusted to act immediately or diminished to be hardly noticeable depending on the frequency with which the level sensor output is utilized in processing the stable platform position. A low frequency utilization will result in a slow correction or "bank" of the stable platform to the artificial horizon. A high frequency utilization will result in the stable platform being more consistent with the sensor's actual indicated horizon."

Page 4 line 18: "The effect on an occupant is that in a turn, the stable platform will "bank" in the proper direction so that the occupant feels as if they are on a level platform. This in turn keeps the inner ear fluid level. Without this banking effect, the natural forces exhibited in turns, accelerations or decelerations centrifugal force of the turn will cause the inner ear fluid to seek the artificial horizon, which, if the occupant is maintained level, will introduce a sense of motion that is unwanted. This effect is clearly demonstrated in an airplâne turn. If the aircraft does not bank in the turn, the occupants feel as if they are being thrown to the side of their seats. If the proper bank is applied, there is no occupant sensation

that the aircraft is proceeding through a turn.”

MPEP: 2163.07(a) Inherent Function, Theory, or Advantage: A level sensor inherently outputs the direction of the artificial horizon which is the result of natural turning and acceleration forces on the level sensor.

Claim 3. “amended” Dependent on Claim 2 combined with items including “table” found in original claim 4, “bed” which is found in original claim 5, “hospital bed” found in original claim 6, “room” which is found in original claim 7. The word “item” is found in original claim 1.

FIGURE 3 illustrates a self-stabilized hospital or operating bed for use on vehicles.

Claim 4. “amended” Dependent on Claim 2 and adds inverted positioning which is found on Page 3 lines 8-10. “The payload platform can also be operated in an inverted position, thus allowing an item needing stabilization to be hung from the stabilized platform.”

Claim 5. “amended” Dependent on Claim 2 and adds autonomous and self correcting which is found on Page 4 line 10; “In one embodiment the present invention uses a novel method which is found in Grober, US 6,6112,662 to make the stable platform autonomous and self correcting.”

The Original Claim 5 reference to a bed has become part of amended Claim 3.

Claim 6. “amended” Dependent on Claim 2, and specifies scalability which is found on page 9 line 14 – 16. “Compact size and light weight are of significant importance. In one embodiment, this invention allows scalability to be smaller or larger... “

The Original Claim 6 reference to a hospital bed, walkway and work station have become part of amended Claim 3.

Claim 7. “canceled” The Original Claim 7 reference to a “room” become part of amended Claim 3.

Claim 8. “amended” Claim 2 written in proper method claim format.

Claim 9. “amended” Original Claim 9 written in proper method claim format. Plus Lines 1-3 are contained in original Claim 1, plus added descriptor “payload” to

identify the platform.

Lines 4-7 starting at “ a stabilizing system connecting the stabilized platform to the base ...” are found on Page 9, line 23 which states: “All embodiments preferably can receive sensor data or direct stabilization commands from the ship’s gyro compass or other sensing source via hard wire or wireless remote control.”

Lines 8-10 starting with “ a braking system...” which is found in original Claim 1 with the word “flopping” removed per discussion with the Examiner.

Lines 11-13 starting with “a control system wherein the sensor data ...” is found on Page 5 line 4: “The present invention automatically corrects to remove the effects of natural centrifugal forces. In addition the “banking” effect can be adjusted to act immediately or diminished to be hardly noticeable depending on the frequency with which the level sensor output is utilized in processing the stable platform position. A low frequency utilization will result in a slow correction or “bank” of the stable platform to the artificial horizon. A high frequency utilization will result in the stable platform being more consistent with the sensor’s actual indicated horizon.”

Page 4 line 18: “The effect on an occupant is that in a turn, the stable platform will “bank” in the proper direction so that the occupant feels as if they are on a level platform. This in turn keeps the inner ear fluid level. Without this banking effect, the natural forces exhibited in turns, accelerations or decelerations centrifugal force of the turn will cause the inner ear fluid to seek the artificial horizon, which, if the occupant is maintained level, will introduce a sense of motion that is unwanted. This effect is clearly demonstrated in an airplane turn. If the aircraft does not bank in the turn, the occupants feel as if they are being thrown to the side of their seats. If the proper bank is applied, there is no occupant sensation that the aircraft is proceeding through a turn.”

MPEP: 2163.07(a) Inherent Function, Theory, or Advantage. By disclosing in a patent application a device that inherently performs a function or had a property, operates according to a theory or has an advantage, a patent application necessarily discloses that function, theory or advantage, even though it says nothing explicit concerning it. The application may later be amended to recite the function, theory or advantage without introducing prohibited new matter.

Claim 10. “amended” Dependent upon Claim 9 and adds the step of placing persons or items on, or attached to the stabilized payload platform. Reference is found in Summary of the Invention on page 8 lines 16 – 17. “In a further embodiment a table attaches to the

stabilized chair, (or platform) allowing for a stabilized work station for both the operator and the objects upon the table.”

Claim 11. “amended” Original Claim 11 written in proper method claim format and dependent on Claim 9.

Claim 12. “amended” Original Claim 12 written in proper method claim format and dependent on Claim 9.

Claim 13. “amended” Dependent upon Claim 2 instead of the previous claim 3.

Added descriptor “Payload” to platform as found in original Claim 1. Added word “items” as found in original Claim 1.

Claim 14. “amended” Changed “anti motion device” to stabilizing device as noted previously. Added descriptor “payload” to platform as noted previously, and removed words stabilized platform for clarity.

Claim 15. “amended” 15. Dependent upon Claim 2 instead of Claim 1. Changed “anti motion device” to “stabilizing device” as noted previously for clarity.

The wording the device and may have “a locking device or attachment hardware to secure it to a vessel or vehicle” is found on page 11, lines 16-18. “Optional wheels 3 can also be used for mobility and should have a locking device or attachment hardware 4 to secure the anti-motion sickness chair to the deck.

Page 12 lines 14 – 16. Similar wording is found “The base plate 2 can include wheels 3 to give the stabilized table mobility. Attachment hardware 4 is used to secure the device to the vehicle ...”

Claim 16. “amended” Changed “anti motion device” to “stabilizing device” as noted previously for clarity. Claim is dependent upon Claim 2 instead of Claim 1.

Added words “one or more of;” to the original Claim 16 wording.

Claim 17. “amended” Changed “anti motion device” to “stabilizing device” as noted previously for clarity

Claim 18. "amended" Original Claim 18 modified for clarity.

Reference to motion sickness is found in the Background of the Invention on page 2, lines 1-3. "It is desirable when traveling on vehicles, primarily boats, but which may also encompass land, air and undersea vehicles, to reduce or eliminate the pitch and roll which is associated with and induces motion sickness.

"mounting one or more stabilization devices" is shown in FIG 5 and described on page 14 line 12 as "a tour boat outfitted with anti-motion sickness chairs."

Original Claim 18 stated "grouping one or more anti-motion sickness devices on a sightseeing vehicle whereupon a group is formed and stabilized from the vehicle pitch and roll in one two and three orthogonal axes."

Reference to the occupant controlling the device is found in "Summary of the Invention" page 8 lines 9-11. The occupant can control the device using a control panel. The controls would include but are not limited to; On/Off, horizontal angle of stabilization, speed of stabilization and direction to be faces when stabilizing in all three axes."

Claim 19. (canceled.)

Claim 20. "amended" Changed "anti motion device" to "stabilizing device" as noted previously for clarity.

Page 8 line 23 describes various "actuators including linear actuators, motors and gear, Page 9 lines 6-9 describe various type of actuators described and apparent to one skilled in the art. Descriptor "payload" added to describe the platform.



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